IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

MILLENNIUM PHARMACEUTICALS, INC.,)
Plaintiff,)
v.) C.A. No
QILU PHARMACEUTICAL CO., LTD., and QILU PHARMA INC.,)))
Defendants.))

COMPLAINT

Plaintiff Millennium Pharmaceuticals, Inc., by its attorneys, alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement under the patent laws of the United States, Title 35, United States Code, that arises out of the filing by Defendants Qilu Pharmaceutical Co., Ltd. and Qilu Pharma Inc. ("Qilu") of Abbreviated New Drug Application ("ANDA") No. 210824 with the U.S. Food and Drug Administration ("FDA") seeking approval to manufacture and sell a generic version of VELCADE® for Injection prior to the expiration of U.S. Patent Nos. 6,713,446 and 6,958,319 (the "Patents-in-Suit").

PARTIES

2. Plaintiff Millennium Pharmaceuticals, Inc. ("Millennium") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business at 40 Landsdowne Street, Cambridge, Massachusetts 02139. Millennium is engaged in the business of developing, manufacturing, and selling pharmaceutical drug products, particularly for use in the therapeutic area of oncology.

- 3. On information and belief, Defendant Qilu Pharmaceutical Co., Ltd. ("Qilu Ltd.") is a Chinese company, having a principal place of business at No. 243, Gong Ye Bei Road, Jinan, 250101, China.
- 4. On information and belief, Defendant Qilu Pharma Inc. ("Qilu Inc.") is a corporation organized and existing under the laws of the State of Pennsylvania, having a principal place of business at 101 Lindenwood Drive, Suite 225, Malvern, PA 19355.
 - 5. On information and belief, Qilu Ltd. is the ultimate parent company of Qilu Inc..
 - 6. On information and belief, Qilu Inc. is the U.S. agent for Qilu Ltd..
- 7. Upon information and belief, Qilu Ltd., itself and through its subsidiaries and agents, including Qilu Inc., manufactures, distributes and/or imports generic drugs for sale and use throughout the United States, including in this judicial district.
- 8. Upon information and belief, Qilu Inc. manufactures, distributes and/or imports generic drugs for sale and use throughout the United States and in this judicial district at the direction, under the control, and for the direct benefit of Qilu Ltd..
- 9. Upon information and belief, Defendants acted collaboratively in the preparation and submission of ANDA No. 210824.
- 10. Upon information and belief, following any FDA approval of ANDA No. 210824, Qilu Ltd., itself and through its subsidiaries and agents, including Qilu Inc., will make, use, offer to sell, and/or sell the generic products that are the subject of ANDA No. 210824 throughout the United States, including in the State of Delaware, and/or import such generic products into the United States.

JURISDICTION AND VENUE

- 11. This action arises under the patent laws of the United States of America and this Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202.
 - 12. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391 and 1400(b).
- 13. For the purpose of this action only, Qilu Ltd. and Qilu Inc. have consented to venue in this district and to the court's personal jurisdiction over them.
- 14. The court has personal jurisdiction over each of the Defendants because, among other things, they have each committed, or aided, abetted, contributed to and/or participated in the commission of, a tortious act of patent infringement that has led to foreseeable harm and injury to Millennium, a Delaware corporation, which manufactures VELCADE® for Injection for sale and use throughout the United States, including the State of Delaware. This Court also has personal jurisdiction over the Defendants by virtue of, among other things, their systematic and continuous contacts with Delaware as set forth below.
- 15. Upon information and belief, Qilu Ltd., itself and through its subsidiaries and agents, including Qilu Inc., currently manufactures and distributes for sale drug products throughout the United States, including in this judicial district.
- 16. Upon information and belief, Qilu Ltd. directs the operations, management and activities of Qilu Inc. in the United States.
- 17. Upon information and belief, Qilu Ltd., directly or through Qilu Inc., routinely files ANDAs seeking FDA approval to market its drug products in the United States.
- 18. Upon information and belief, Defendants collaborate in the manufacture, marketing, and sale of many pharmaceutical products (including generic drug products

manufactured and sold pursuant to approved ANDAs) throughout the United States, including in this judicial district.

- 19. Upon information and belief, Qilu Inc. sells generic drug products in the United States, including in this judicial district, that are manufactured by Qilu Ltd..
- 20. Upon information and belief, Defendants derive substantial revenue from generic pharmaceutical products that are sold, used, and/or consumed within Delaware.
- 21. Upon information and belief, Defendants will manufacture, market, and/or sell within the United States the generic version of VELCADE® for Injection described in ANDA No. 210824 if FDA approval is granted. If ANDA No. 210824 is approved, the generic version of VELCADE® for Injection charged with infringing the Patent-in-Suit, would, among other things, be marketed and distributed in Delaware, prescribed by physicians practicing in Delaware, and/or used by persons in Delaware, all of which would have a substantial effect on Delaware.
- 22. Qilu has taken advantage of the jurisdiction of this Court by filing counterclaims before this Court and/or consenting to venue and/or personal jurisdiction, including in *Onyx Therapeutics, Inc. v. Qilu Pharma, Inc. et al.*, 1:16-cv-1013-LPS (D. Del.).
- 23. In the alternative, this Court may exercise personal jurisdiction over Qilu Ltd. pursuant to Federal Rule of Civil Procedure 4(k)(2) because (a) Millennium's claims arise under federal law; (b) Qilu Ltd. is a foreign company not subject to personal jurisdiction in the courts of any state; and (c) Qilu Ltd. has sufficient contacts with the United States as a whole, including but not limited to marketing and/or selling generic pharmaceutical products that are distributed and sold throughout the United States, such that this Court's exercise of jurisdiction over Qilu Ltd. satisfies due process.

BACKGROUND

- 24. United States Patent No. 6,713,446 ("the '446 patent"), entitled "Formulation of Boronic Acid Compounds" (Exhibit A hereto), was duly and legally issued on March 30, 2004. The '446 patent, which is owned by the United States of America as Represented by the Secretary of Health and Human Services, will expire on January 25, 2022.
- 25. United States Patent No. 6,958,319 ("the '319 patent"), entitled "Formulation of Boronic Acid Compounds" (Exhibit B hereto), was duly and legally issued on October 25, 2005. The '319 patent, which is owned by the United States of America as Represented by the Secretary of Health and Human Services, will expire on January 25, 2022.
- 26. Millennium has had an exclusive license to the Patents-in-Suit since December 2, 2002, by virtue of an exclusive worldwide license agreement for the research, development, and manufacture of MLN341 (bortezomib) for distribution, sale and use in oncology disease states. Pursuant to this license, Millennium has the right to bring suit in its own name, at its own expense, and on its own behalf for infringement of the Patents-in-Suit.
- 27. VELCADE® for Injection is a proteasome inhibitor, for intravenous or subcutaneous administration, approved by the FDA for the treatment of patients with multiple myeloma and patients with mantle cell lymphoma.
- 28. Millennium sells VELCADE® for Injection in the United States pursuant to New Drug Application No. 21-602 which was approved by the FDA in 2003 and pursuant to several subsequent supplemental new drug applications for additional indications and a new route of administration which have also been approved by the FDA.
- 29. VELCADE® for Injection, and its preparation and use, are covered by one or more claims of the Patents-in-Suit, which have been listed in connection with VELCADE® for

Injection in the FDA's publication, Approved Drug Products with Therapeutic Equivalence Evaluations, referred to as the "Orange Book."

- 30. For example, VELCADE® for Injection is the lyophilized mannitol ester of bortezomib, which has the chemical name D-mannitol N-(2-pyrazine)carbonyl-L-phenylalanine-L-leucine boronate, and which is covered by at least claim 20 of the '446 patent. *See e.g.*, '446 patent, claim 20 ("The lyophilized compound D-mannitol N-(2-pyrazine)carbonyl-L-phenylalanine-L-leucine boronate."); *see also* '446 patent, claims 1-6, 8-16, 18-19, 21-27, 29-38, 47, 49, 58-59, 61-64, 66-67, and 69. Further, the preparation and/or use of VELCADE® for Injection are covered by at least claims 39-40, 42-44, 46, 50-51, 53-55, 57, 65, and 68 of the '446 patent.
- 31. In addition, VELCADE® for Injection is covered by at least claim 26 of the '319 patent. *See*, *e.g.*, '319 patent, claim 26 ("The lyophilized compound of claim 20, wherein said compound is a sugar ester of N-(2-pyrazine)carbonyl-L-phenylalanine-L-leucine boronic acid."); *see also* '319 patent, claims 1-3, 5-9, 11-17, 19-22, 24-25, 27-28, 46, 55, 57, 71, 73, and 75. Further, the preparation, and/or use of VELCADE® for Injection are covered by at least claims 29-31, 33-36, 38-45, 47-48, 50-52, 54, 59-60, 62-64, 66-68, 70, 72, 74, and 76-78 of the '319 patent.
- 32. By letter dated November 9, 2017 (the "Notice Letter"), Defendants notified Millennium that they had submitted to the FDA ANDA No. 210824 for bortezomib for injection, 3.5 mg/vial, a generic version of VELCADE® for Injection ("Defendants' ANDA Product").
- 33. In the Notice Letter, Defendants stated that their ANDA included Paragraph IV certifications with respect to the Patents-in-Suit and alleged that the Patents-in-Suit are invalid,

unenforceable, or will not be infringed by the commercial manufacture, use, offer for sale, or sale of the Defendants' ANDA Product.

- 34. In the Notice Letter, however, Defendants do not contest infringement of claims 1-6, 8-16, 18-27, 29-32, 36-40, 42-44, 46-47, 49, 54-55, 57, 59, and 61-69 of the '446 patent except on the basis of their assertion that these claims are invalid. These claims are variously directed to mannitol esters of a genus of chemical compounds that encompasses bortezomib, the mannitol ester of bortezomib, the lyophilized mannitol ester of bortezomib, a composition comprising mannitol esters of a genus of chemical compounds that encompasses bortezomib and a pharmaceutically-acceptable carrier, a composition comprising the lyophilized mannitol ester of bortezomib and a pharmaceutically acceptable carrier, a lyophilized cake comprising the lyophilized mannitol ester of bortezomib and a pharmaceutically acceptable carrier, as well as a method of preparing the lyophilized mannitol ester of bortezomib, a lyophilized cake comprising the lyophilized mannitol ester of bortezomib prepared in accordance with that method, and a composition comprising a pharmaceutically-acceptable carrier and the lyophilized mannitol ester of bortezomib prepared according to that method.
- 35. In addition, in the Notice Letter Defendants do not contest infringement of claims 1-3, 5-9, 11-17, 19-22, 24-31, 33-36, 38-40, 44-48, 50-52, 54-55, 57, 59-60, 62-64, 66-68, and 70-78 of the '319 patent except on the basis of their assertion that these claims are invalid. These claims variously encompass mannitol esters of a genus of chemical compounds that encompasses bortezomib, the mannitol ester of bortezomib, the lyophilized mannitol ester of bortezomib, a composition comprising mannitol esters of a genus of chemical compounds that encompasses bortezomib and a pharmaceutically-acceptable carrier, a composition comprising

the lyophilized mannitol ester of bortezomib and a pharmaceutically acceptable carrier, a lyophilized cake comprising the lyophilized mannitol ester of bortezomib, a composition comprising the mannitol ester of bortezomib and a pharmaceutically acceptable carrier, as well as a method of preparing the lyophilized mannitol ester of bortezomib, a lyophilized cake comprising the lyophilized mannitol ester of bortezomib prepared in accordance with that method, and a composition comprising a pharmaceutically-acceptable carrier and the lyophilized mannitol ester of bortezomib prepared according to that method.

- 36. Defendants have committed an act of infringement pursuant to 35 U.S.C. § 271(e)(2)(A) by filing ANDA No. 210824 under 21 U.S.C. § 355(j)(2), seeking approval to engage in the commercial manufacture, use and/or sale of the Defendants' ANDA Product before the expiration of the terms of the Patents-in-Suit.
- 37. The sale, offer for sale, importation, preparation, and/or use of the proposed Defendants' ANDA Product for which Defendants seek approval in their ANDA will directly and/or indirectly infringe one or more claims of the Patents-in-Suit.
- 38. Millennium is entitled under 35 U.S.C. § 271(e)(4) to full relief from Defendants' acts of infringement, including an Order by this Court ensuring that the effective date of any approval of ANDA No. 210824 relating to the proposed Defendants' ANDA Product shall not be earlier than the expiration of the Patents-in-Suit.
- 39. This action was commenced before the expiration of forty-five days from the date of Millennium's receipt of the Notice Letter.

COUNT I (Infringement of U.S. Patent No. 6,713,446)

40. Millennium incorporates each of the preceding paragraphs 1-39 as if fully set forth herein.

- 41. Defendants' submission of ANDA No. 210824 for the purpose of obtaining approval to engage in the commercial manufacture, use, offer for sale, and/or sale of the Defendants' ANDA Product before the expiration of the '446 patent is an act of infringement of the '446 patent under 35 U.S.C. § 271(e)(2)(A).
- 42. Upon information and belief, Defendants intend to engage in the manufacture, use, offer for sale, sale, and/or importation of the Defendants' ANDA Product with its proposed labeling immediately and imminently upon approval of ANDA No. 210824.
- 43. The commercial manufacture, use, offer for sale, sale and/or importation of the Defendants' ANDA Product would directly infringe one or more claims of the '446 patent. For example, upon information and belief, the Defendants' ANDA Product and/or the intended use thereof are covered by at least claims 1-6, 8-16, 18-27, 29-32, 36-40, 42-44, 46-47, 49-51, 53-55, 57-59, and 61-69 of the '446 patent (the "'446 Asserted Claims").
- 44. Defendants had knowledge of the '446 patent when they submitted their ANDA to the FDA. Further, upon information and belief, Defendants know (or are willfully blind to the fact) that the commercial manufacture, use, offer to sell, sale, or importation of the Defendants' ANDA Product will constitute infringement of at least the '446 Asserted Claims. Upon information and belief, this knowledge is reflected through, among other things, the '446 patent's listing in the Orange Book in relation to VELCADE® for Injection, prior litigation related to the '446 patent, including *Millennium Pharmaceuticals, Inc. v. Sandoz Inc.*, C.A. No. 12-1011-GMS (consolidated), *Millennium Pharmaceuticals, Inc. v. Sandoz Inc.*, No. 15-2066 (Fed. Cir.), and Defendants' Notice Letter, which does not contest infringement of claims 1-6, 8-16, 18-27, 29-32, 36-40, 42-44, 46-47, 49, 54-55, 57-59, and 61-69 of the '446 patent except on the basis of Defendants' assertion that these claims are invalid.

- 45. Upon information and belief, use of the Defendants' ANDA Product in accordance with and as directed by Defendants' proposed labeling for that product would infringe one or more claims of the '446 patent. For example, upon information and belief, Defendants' proposed labeling will instruct that the Defendants' ANDA Product is the lyophilized mannitol ester of bortezomib and will instruct that the Defendants' ANDA Product be prepared for administration in a manner covered by at least claims 39-40, 42-44, 46, 50-51, 53-55, 57, 63, 65, and 68 of the '446 patent. Accordingly, Defendants will actively induce infringement under 35 U.S.C. § 271(b) of at least claims 39-40, 42-44, 46, 50-51, 53-55, 57, 63, and 68 of the '446 patent upon approval of ANDA No. 210824.
- 46. The Defendants' ANDA Product is specially made to infringe at least claims 39-40, 42-44, 46, 50-51, 53-55, 57, 63, 65, and 68 of the '446 Patent, and has no substantial non-infringing use. Accordingly, the commercial manufacture, use, offer to sell, sale, or importation of the Defendants' ANDA Product will contributorily infringe at least claims 39-40, 42-44, 46, 50-51, 53-55, 57, 63, 65, and 68 of the '446 Patent under 35 U.S.C. § 271(c).
- 47. Upon information and belief, Defendants acted without a reasonable basis for believing that they would not be liable for directly and indirectly infringing the '446 patent.
- 48. Unless Defendants are enjoined from directly and indirectly infringing the '446 patent, Millennium will suffer irreparable injury. Millennium has no adequate remedy at law.

COUNT II (Infringement of U.S. Patent No. 6,958,319)

- 49. Millennium incorporates each of the preceding paragraphs 1-48 as if fully set forth herein.
- 50. Defendants' submission of ANDA No. 210824 for the purpose of obtaining approval to engage in the commercial manufacture, use, offer for sale, and/or sale of the

Defendants' ANDA Product before the expiration of the '319 Patent is an act of infringement of the '319 Patent under 35 U.S.C. § 271(e)(2)(A).

- 51. Upon information and belief, Defendants intend to engage in the manufacture, use, offer for sale, sale, and/or importation of the Defendants' ANDA Product with its proposed labeling immediately and imminently upon approval of ANDA No. 210824.
- 52. The commercial manufacture, use, offer for sale, sale and/or importation of the Defendants' ANDA Product would directly infringe one or more claims of the '319 Patent. For example, upon information and belief, the Defendants' ANDA Product and/or the intended use thereof are covered by at least claims 1-3, 5-9, 11-17, 19-22, 24-31, 33-36, 38-40, 44-48, 50-52, 54-55, 57, 59-60, 62-64, 66-68, and 70-78 of the '319 Patent (the "'319 Asserted Claims").
- 53. Defendants had knowledge of the '319 Patent when they submitted their ANDA to the FDA. Further, upon information and belief, Defendants know (or are willfully blind to the fact) that the commercial manufacture, use, offer to sell, sale, or importation of the Defendants' ANDA Product will constitute infringement of at least the '319 Asserted Claims. Upon information and belief, this knowledge is reflected through, among other things, the '319 Patent's listing in the Orange Book in relation to VELCADE® for Injection, prior litigation related to the '319 Patent, including *Millennium Pharmaceuticals, Inc. v. Sandoz Inc.*, C.A. No. 12-1011-GMS (consolidated), and Defendants' Notice Letter, which does not contest infringement of claims 1-3, 5-9, 11-17, 19-22, 24-31, 33-36, 38-40, 44-48, 50-52, 54-55, 57, 62-64, 66-68, and 70-78 of the '319 Patent, except on the basis of Defendants' assertion that these claims are invalid.
- 54. Upon information and belief, use of the Defendants' ANDA Product in accordance with and as directed by Defendants' proposed labeling for that product would

infringe one or more claims of the '319 Patent. For example, upon information and belief, Defendants' proposed labeling will instruct that the Defendants' ANDA Product is the lyophilized mannitol ester of bortezomib and will instruct that the Defendants' ANDA Product be prepared for administration in a manner covered by at least claims 47-48, 50-52, 54, 59-60, 62-64, 66-68, 70, 72, 74, and 77 of the '319 Patent. Accordingly, Defendants will actively induce infringement under 35 U.S.C. § 271(b) of at least claims 47-48, 50-52, 54, 59-60, 62-64, 66-68, 70, 72, 74, and 77 of the '319 Patent upon approval of ANDA No. 210824.

- 55. The Defendants' ANDA Product is specially made to infringe at least claims 47-48, 50-52, 54, 59-60, 62-64, 66-68, 70, 72, 74, and 77 of the '319 Patent, and has no substantial non-infringing use. Accordingly, the commercial manufacture, use, offer to sell, sale, or importation of the Defendants' ANDA Product will contributorily infringe at least claims 47-48, 50-52, 54, 59-60, 62-64, 66-68, 70, 72, 74, and 77 of the '319 Patent under 35 U.S.C. § 271(c).
- 56. Upon information and belief, Defendants acted without a reasonable basis for believing that they would not be liable for directly and indirectly infringing the '319 Patent.
- 57. Unless Defendants are enjoined from directly and indirectly infringing the '319 Patent, Millennium will suffer irreparable injury. Millennium has no adequate remedy at law.

PRAYER FOR RELIEF

WHEREFORE, Millennium prays that this Court grant the following relief:

(a) A judgment that Defendants' submission of ANDA No. 210824 was an act of infringement of the Patents-in-Suit, and that Defendants' manufacture, use, offer to sell, sale, or importation of the Defendants' ANDA Product prior to the expiration of the Patents-in-Suit, will infringe and/or actively induce and/or contribute to infringement of the Patents-in-Suit;

- (b) An Order pursuant to 35 U.S.C. § 271(e)(4)(A) providing that the effective date of any FDA approval of Defendants' ANDA No. 210824, or any product or compound that infringes the Patents-in-Suit, shall not be earlier than the expiration of the Patents-in-Suit;
- (c) An Order permanently enjoining Defendants, and their affiliates and subsidiaries, and each of their officers, agents, servants and employees, from making, have made, using, offering to sell, selling, marketing, distributing, or importing the Defendants' ANDA Product, or any product or compound that infringes the Patents-in-Suit, or inducing or contributing to the infringement of the Patents-in-Suit until after the expiration of the Patents-in-Suit;
- (d) A declaration that this is an exceptional case and an award of attorneys' fees to Millennium pursuant to 35 U.S.C. §§ 285 and 271(e)(4), together with its reasonable costs; and
 - (e) Such further and other relief as this Court deems proper and just.

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